

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Improvements to roads and construction of RCC drains at Vishwanagar and surrounding areas in Ward No. 03

Sl No	Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
1	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1)								
		Cum							
	For RCC Drain								
	Mn Rd Rajeevnagar		2	68.00	1.20	0.90	146.88		
	Cross Road 1		2	123.00	1.20	0.90	265.68		
	Cross Road 2		2	78.00	1.20	0.90	168.48		
	Cross Road 3		2	67.00	1.20	0.90	144.72		
	Cross Road 4		2	23.00	1.20	0.90	49.68		
	Cross Road 5		2	36.00	1.20	0.90	77.76		
	Cross Road 6		2	45.00	1.20	0.90	97.20		
	Cross Road 7		1	54.00	1.20	0.90	58.32		
	Drain desilt		1	31.50	0.50	0.45	6.76		
	For RCC Culvert		9	7.20	1.50	1.00	97.20		
							1112.68	215.28	239537.75
	Basic Rate Rs. =	130.00							
	Add 6% A.W Rs. =	7.80							
	Sub Total =	137.80							
	8Km Lead, Loading and Unloading =(2*1.28*8)+57	77.48							
	Total Rate Rs. =	215.28							
2	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222, I No-27,18)								
		Cum							
	For Drain								
	Mn Rd Rajeevnagar		2	68.00	1.20	0.15	24.48		
	Cross Road 1		2	123.00	1.20	0.15	44.28		
	Cross Road 2		2	78.00	1.20	0.15	28.08		
	Cross Road 3		2	67.00	1.20	0.15	24.12		
	Cross Road 4		2	23.00	1.20	0.15	8.28		
	Cross Road 5		2	36.00	1.20	0.15	12.96		
	Cross Road 6		2	45.00	1.20	0.15	16.20		
	Cross Road 7		1	54.00	1.20	0.15	9.72		
	For RCC Culvert		9	7.20	1.50	0.15	14.58		
	Vishwanagar CC Platform								
	Surrounding Apartment, small area		20	28.50	3.10	0.20	353.40		
							536.10	5421.90	2906680.59
	Basic Rate Rs. =	5115.00							
	Add 6% A.W Rs. =	306.90							
	Total Rate Rs. =	5421.90							
3	KSRRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13, I No-4.6)								
		Cum							
	For Drain								
	Vishwanagar								
	SSM Flagging		2	31.50	0.45	0.15	4.25		
	Coping		2	31.50	0.45	0.10	2.84		
	Bed concrete		1	31.50	0.50	0.15	2.36		
							9.45	5768.52	54512.51

SI No	Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
	Basic Rate Rs. =	5442.00							
	Add 6% A.W Rs. =	326.52							
	Total Rate Rs. =	5768.52							
4	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13. (P.No-13,I No-5.9)								
	For Drain	Cum							
	Vishwanagar								
	SSM Flagging		2	31.50	0.45	0.20	5.67		
							5.67	5811.98	32953.93
	Basic Rate Rs. =	5483.00							
	Add 6% A.W Rs. =	328.98							
	Total Rate Rs. =	5811.98							
5	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centring shuttering cost of material HOM of machinery curing etc., complete excluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&I WTD S.R 2018-19)								
	For RCC Drain	Cum							
	Bottom slab								
	Mn Rd Rajeevnagar		2	68.00	1.10	0.15	22.44		
	Cross Road 1		2	123.00	1.10	0.15	40.59		
	Cross Road 2		2	78.00	1.10	0.15	25.74		
	Cross Road 3		2	67.00	1.10	0.15	22.11		
	Cross Road 4		2	23.00	1.10	0.15	7.59		
	Cross Road 5		2	36.00	1.10	0.15	11.88		
	Cross Road 6		2	45.00	1.10	0.15	14.85		
	Cross Road 7		1	54.00	1.10	0.15	8.91		
	side walls								
	Mn Rd Rajeevnagar		4	68.00	0.15	0.60	24.48		
	Cross Road 1		4	123.00	0.15	0.60	44.28		
	Cross Road 2		4	78.00	0.15	0.60	28.08		
	Cross Road 3		4	67.00	0.15	0.60	24.12		
	Cross Road 4		4	23.00	0.15	0.60	8.28		
	Cross Road 5		4	36.00	0.15	0.60	12.96		
	Cross Road 6		4	45.00	0.15	0.60	16.20		
	Cross Road 7		2	54.00	0.15	0.90	14.58		
							327.09		
	For RCC Culvert								
	Raft		9	7.20	1.30	0.23	19.38		
	side walls		18	7.20	0.23	0.60	17.88		
							37.26		
						Net Qty.	364.35	7070.20	2576027.37
	Basic Rate Rs. =	6670.00							
	Add 6% A.W Rs. =	400.20							
	Total Rate Rs. =	7070.20							
6	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebtrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&I WTD S.R 2018-19)								
	Considering steel For Drain	Tonne		327.09	0.070	--	22.90		
	Considering steel For Culvert			37.26	0.100	--	3.73		
							26.62	73992.24	1969843.61
	Basic Rate Rs. =	69804.00							

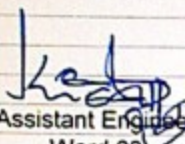
Sl No	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate In Rs	Amount In Rs
	Add 6% A.W Rs. =	4188.24							
	Total Rate Rs. =	73992.24							
7	Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	For drain cover slab	Sqm							
	Mn Rd Rajeevnagar		2	68.00	0.90	--	122.40		
	Cross Road 1		2	123.00	0.90	--	221.40		
	Cross Road 2		2	78.00	0.90	--	140.40		
	Cross Road 3		2	67.00	0.90	--	120.60		
	Cross Road 4		2	23.00	0.90	--	41.40		
	Cross Road 5		2	36.00	0.90	--	64.80		
	Cross Road 6		2	45.00	0.90	--	81.00		
	Cross Road 7		1	54.00	0.90	--	48.60		
	SSM Flagging		1	28.00	0.90	--	25.20		
							865.80	2337.00	2023374.60
8	Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	For Culvert Slabs	Sqm	9	7.20	1.20	--	77.76	5418.00	421303.68
9	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials separately complete as per specifications. MORTH Specification No. 202 with 8km lead= (I No-18.47,P No-140)								
	For Concrete Road	Cum							
	Vishwanagar CC Platform								
	Surrounding Apartment, small area		20	28.50	3.10	0.25	441.75		
							441.75	973.42	430008.29
	Basic Rate Rs.=	899.00							
	Add 6% A.W Rs. =	53.94							
	Sub Total =	952.94							
	8Km Lead, Loading and Unloading (=2*1.28*8)	20.48							
	Total Rate Rs. =	973.42							
10	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum, Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rakers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermeable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour, hire charges of machineries, all lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1)								
	For Concrete Road	Cum							
	Vishwanagar CC Platform								
	Surrounding Apartment, small area		20	28.50	3.10	0.150	265.05		
							265.05	5210.96	1381164.95
	Basic Rate Rs.=	4916.00							
	Add 6% A.W Rs. =	294.96							
	Total Rate Rs. =	5210.96							

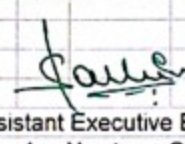
SI No	Description of work	Unit	No	Length m	Breadth m	Depth m	Quantity	Rate in Rs	Amount in Rs
11	Vaccum De- writing with vaccum pump and suction mat and compaction with skin flater clubbed with floating disc including cost of generator, HOM of machinery Sereed Vibratory Power Floaterblade and diisc etc. with all lead and lift. (Page No 176 Item No 22.7)								
	For Concrete Road	Sqm							
	Vishwanagar CC Platform								
	Surrounding Apartment, small area		20	28.50	3.10		1767.00		
							1767.00	72.08	127365.36
	Basic Rate Rs. =	68.00							
	Add 6% A.W Rs. =	4.08							
	Total Rate Rs. =	72.08							
12	KSRRB M300-53. Construction of embankment with approved material Gravel/Murum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murum, watering charges & compaction by vibratory roller to 95% of modified proctors density. MORTH Specification No. 305 (P.No-148,I No-19.60)								
	For Footpath	Cum							
	2nd cross		1	119.00	2.00	0.250	59.50		
							59.50	344.50	20497.75
	Basic Rate Rs. =	325.00							
	Add 6% A.W Rs. =	19.50							
	Total Rate Rs. =	344.50							
13	KSRB 14.6 : Providing and laying heavy duty cobble stones interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications.Specification No. KBS (P.No-103,I No-14.60), 60mm thick								
	For Footpath	Sqm							
	2nd cross		1	119.00	2.00		238.00		
							238.00	1116.18	265650.84
	Basic Rate Rs. =	1053.00							
	Add 6% A.W Rs. =	63.18							
	Total Rate Rs. =	1116.18							
14	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
		Nos							
	Vishwanagara								
	Mn Rd Rajeevnagar		2	68.00			136.00		
	Cross Road 6		2	45.00			90.00		
							226.00		
							502.00	432.48	217104.96
	Basic Rate Rs. =	408.00							
	Add 6% A.W Rs. =	24.48							
	Total Rate Rs. =	432.48							
15	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19)								
	For Drain	Sqm							
	Vishwanagara								
	Mn Rd Rajeevnagar		2	68.00	0.35		47.60		
	Cross Road 6		2	45.00	0.35		31.50		
							79.10	84.80	6707.68
	Basic Rate Rs. =	80.00							
	Add 6% A.W Rs. =	4.80							
	Total Rate Rs. =	84.80							

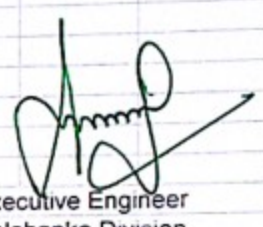
SI No	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs	Amount in Rs
				m	m	m			
								Sub Total 1 Rs.	12672735.41
	Add GST @ 12%								1520728.25
	Add KRIDL @ 4%								506909.42
	DPR & PMC Charges including								299000.00
								Sub Total 2 Rs.	14999373.08
	Miscellaneous & Rounding off								626.92
								Total Rs.	15000000.00

CERTIFICATE:

- 1 The work spot has been inspected by me and the work is found to be necessary
- 2 The estimate is prepared as per PW, P&I WTD S.R Bangalore circle for the year 2018-2019
- 3 The Provisions made in the estimate are quite necessary and adequate.
- 4 The area comes within the BBMP limits.


 Assistant Engineer
 Ward 03
 BBMP


 Assistant Executive Engineer
 Yelahanka Newtown Sub Division
 BBMP


 Executive Engineer
 Yelahanka Division
 BBMP

Administrative Sanction for Rs. 150.00 lakhs
one crore fifty lakhs
only
 is accorded under head p-3749
CM. Nava nagarwathana grants
10- village
 Registered as CE No. Subject
 to conditions contained in p. 3749
 No. EE/YNK/70/2019-20 Date 7/11/2019

 Executive Engineer

Technical Sanction
 Accorded For Rs. 150.00 lakhs only
 Head of A/C P. 3749
 CER NO : 212 Date 08.11.2019

 [IA] [CE (YNK)]